IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended). A wireless communication apparatus with a semiconductor integrated circuit which has a non-contact IC card function and a wireless reader/writer function for a non-contact IC card, comprising:

an antenna configured to carry out communication with an external non-contact IC card and an external wireless reader/writer, said ~~anteann~~ antenna including a loop of coil with plural windings;

demodulation means for demodulating a first received signal transmitted from [[an]] the external wireless reader/writer and received through a the antenna or a second received signal transmitted from [[an]] the external non-contact IC card;

full-wave rectification and smoothing means for subjecting the first received signal to full-wave rectification and smoothing;

first transmission means for transmitting a first transmission signal to the external wireless reader/writer through the antenna while the semiconductor integrated circuit is in an non-contact IC card mode of operation;

second transmission means for transmitting a second transmission signal to the external non-contact IC card through the antenna while the semiconductor inetgrated circuit is in a wireless reader/writer mode of operation; and

a capacitor connecting the second transmission means to a center tap of the antenna, ~~wherien~~ wherein when the second transmisison means drives the ~~anntenna~~ antenna, a current from the second transmission means flows only to a half of the windings of the loop of coil of the ~~anttenna~~ antenna and an another current flows ~~throgh~~ through a remaining portion of the loop of coil by electromagnetic induction.

Claim 2 (Currently Amended). A [[s]] wireless communication apparatus according to claim 1, further comprising stabilization means for stabilizing the power obtained from the first received signal subjected to the full-wave rectification and smoothing by the full-wave rectification and smoothing means.

Claim 3 (Previously Presented). A wireless communication apparatus according to claim 1, wherein the first transmission means is connected behind the full-wave rectification and smoothing means as well as transmits the first transmission signal by changing a load of an antenna of the external wireless reader/writer electromagnetically coupled with the antenna.

Claim 4 (Canceled).

Claim 5 (Currently Amended). A [[s]] wireless communication apparatus according to claim 1, wherein the second transmission means transmits the second transmission signal that is a differential signal created based on a transmission carrier signal having a predetermined frequency and data to be transmitted to the external non-contact IC card.

Claim 6 (Currently Amended). A [[s]] wireless communication apparatus according to claim 1, wherein the demodulation means demodulates the first received signal as a differential signal or the second received signal as the differential signal.

Claim 7 (Canceled).

Claim 8 (Currently Amended). A wireless communication apparatus which has a non-contact IC card function and a wireless reader/writer function for non-contact IC card comprising:

an antenna configured to carry out communication with an external non-contact IC card and an external wireless reader/writer;

a demodulation unit configured to demodulate for demodulating a first received signal transmitted from the external wireless reader/writer and received through the antenna or a second received signal transmitted from the external non-contact IC card and received through the antenna;

a full-wave rectification and smoothing unit configured to subject the first received signal to full-wave rectification and smoothing;

a first transmission unit configured to transmit a first transmission signal to the external wireless reader/writer through the antenna while the wireless communication apparatus is in an non-contact IC card mode of operation;

a second transmission unit configured to transmit a second transmission signal to the external non-contact IC card through the antenna while the wireless communication apparatus is in an wireless reader/writer mode of operation; and

~~and~~

a capacitor connecting the second transmission unit a center tap of the antenna, ~~wherien~~ wherein when the second transmisison unit drives the anntenna, a current from the second transmission unit flows only to a half of the windings of the loop of coil of the ~~anttenna~~ antenna and an another current flows ~~throgh~~ through a remaining portion of the loop of coil by electromagnetic induction.

Claim 9 (Canceled).

Claim 10 (Previously Presented). A wireless communication apparatus of claim 1, further comprising:

a battery;

a power supply control unit configured to supply power to components of the wireless communication apparatus received from the external wireless reader/writer while the wireless communication apparatus is in the non-contact IC card mode of operation, and to supply power to components of the wireless communication apparatus from the battery while the wireless communication apparatus is in the wireless reader/writer mode of operation.

Claim 11 (Previously Presented). A wireless communication apparatus of claim 10, wherein the power supply control unit is further configured to provide power to components of the wiress communication apparatus from both the battery and from the external wireless reader/writer while the wireless communication apparatus is in the non-contact IC card mode of operation.

Claim 12 (Previously Presented). A wireless communication apparatus of claim 8, further comprising:

a battery;

a power supply control unit configured to supply power to components of the wireless communication apparatus received from the external wireless reader/writer while the wireless communication apparatus is in the non-contact IC card mode of operation, and to supply power to components of the wireless communication apparatus from the battery while the wireless communication apparatus is in the wireless reader/writer mode of operation.

Claim 13 (Previously Presented). A wireless communication apparatus of claim 12, wherein the power supply control unit is further configured to provide power to components of the wiress communication apparatus from both the battery and from the external wireless reader/writer while the wireless communication apparatus is in the non-contact IC card mode of operation.